SONY

Product Data Sheet

PE/Dazzle™ 594 anti-human FcεRIα

Catalog # / Size: 2273165 / 25 tests
2273170 / 100 tests

Clone: AER-37 (CRA-1)

Isotype: Mouse IgG2b, κ

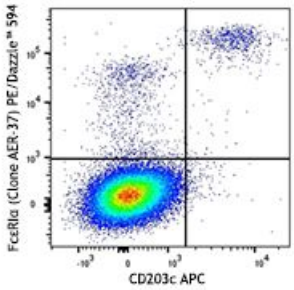
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: VI CD72.1

Concentration: Lot-specific



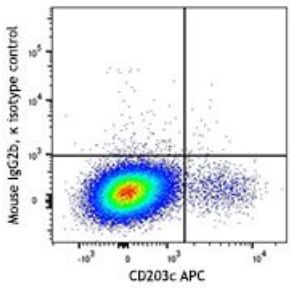
Human peripheral blood lymphocytes were stained with CD203c APC and FcεRIα (clone AER-37) PE/Dazzle™ 594 (top) or mouse IgG2b, Îº PE/Dazzle™ 594 isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.



Application Notes: Clone AER-37 (CRA-1) has been reported to bind the receptor even in the presence of IgE.4

Application References:

1. Yamaguchi M, *et al.* 1999. *J. Immunol.* 162:5455.
2. Suzukawa M, *et al.* 2005. *Int. Immunol.* 17:1249.
3. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) PubMed
4. Yamaguchi M, *et al.* 1999. *J. Immunol.* 162:5455.

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Description: High affinity IgE receptor (FcεRI) plays a key role in IgE-mediated allergic immune response. FcεRI is a tetrameric receptor complex, which is composed of one α-subunit (FcεRIα), one β-subunit, and two γ-subunits. FcεRIα directly binds IgE with high affinity, while the β- and γ-chains are responsible for mediating intracellular signals. FcεRIα is a 50 kD transmembrane protein with Ig superfamily structure. It is primarily found on mast cells and basophils. Further studies have indicated that FcεRIα is also expressed on many inflammatory cells including cutaneuos Langerhans cells, dendritic cells, monocytes of patients with allergic disorders, platelets, bronchial epithelial cells, eosinophils produced in hypereosinophilic syndrome, and neutrophils from allergy-induced asthma patients.

Antigen References:

1. Riske F, *et al.* 1991. *J. Biol. Chem.* 266:11245
2. Gounni AS, *et al.* 2001. *FASEB J.* 15:940.
3. Maurer D, *et al.* 1996. *J. Immunol.* 157:607
4. Maurer d, *et al.* 1994. *J. Exp. Med.* 179:745
5. Campbell AM, *et al.* 1998. *Am. J. Respir. Cell Mol. Biol.* 19:92.

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